

Notice of Allowability

Application No.

09/932,183

Examiner

William W. Moore

Applicant(s)

ESTELL, DAVID A.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to The amendment filed 8 April 2004 and the interview conducted 21 May 2004.
2. ☒ The allowed claim(s) is/are 1 and 6-10.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 20040521.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

A PROPOSED examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Cancel claims 4 and 5.

Rewrite claims 1 and 6-10 thus:

1. (Amended) An isolated *Bacillus subtilis* cell having a mutation or deletion of part or all of the nucleic acid sequence encoding the metalloprotease (~~MP~~) having the amino acid sequence set forth in SEQ ID NO:2 wherein said mutation or deletion results in the inactivation of the metalloprotease ~~MP~~ proteolytic activity.

6. (Amended) The *Bacillus* cell ~~microorganism~~ of Claim 1 ~~Claims 1, 2, 3, 4 or 5~~ wherein said cell ~~microorganism~~ further comprises a nucleic acid sequence ~~wherein said nucleic acid sequence encodes~~ encoding a heterologous protein.

7. (Amended) The *Bacillus* cell ~~microorganism~~ of Claim 1 ~~Claims 1, 2, 3, 4 or 5~~ wherein said cell ~~microorganism~~ further comprises a nucleic acid sequence ~~wherein said nucleic acid sequence encodes~~ encoding a homologous protein.

8. (Amended) The *Bacillus* cell ~~microorganism~~ of Claim 6 wherein said heterologous protein is selected from the group consisting of a hormone, an enzyme, a growth factor and a cytokine.

9. (Amended) The *Bacillus* cell ~~microorganism~~ of Claim 8 wherein said heterologous protein is an enzyme.

10. (Amended) The *Bacillus* cell ~~microorganism~~ of Claim 9 wherein said enzyme is selected from the group consisting of a protease ~~proteases~~, a carbohydrase ~~carbohydrases~~, a lipase ~~lipases~~, an isomerase ~~isomerases~~, an epimerase ~~epimerases~~,

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a tautomerase ~~tautomerases~~, a mutase ~~mutases~~, a transferase ~~transferases~~, a kinase ~~kinases~~, and a phosphatase ~~phosphatases~~.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Kamrin T. MacKnight on May 21, 2004.

The following is an examiner's statement of reasons for allowance:

Applicant's Amendment filed April 8, 2004, limits the subject matter to a nucleic acid sequence encoding SEQ ID NO:2, thus the claimed subject matter is free of the prior art of record for the reasons set forth at page 12 of the communication mailed November 17, 2003. The examiner's amendment above cancels claims 4 and 5 because they are redundant with the amended claim 1 where the sequence required by claim 4 is the amino acid sequence of SEQ ID NO:2 stated in claim 1 and the nucleic acid sequence of claim 5 is the same nucleic acid sequence that claim 1 requires. Claim 1 is amended to more clearly and more definitely describe the intended subject matter. Claims 6-10 are amended to more clearly describe the intended subject matter and, because claims 2-5 are now canceled, to state dependency from claim 1 in claims 6 and 7.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William W. Moore whose telephone number is now 571.272.0933. The examiner can normally be reached between 9:00AM and 5:30PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy, can now be reached at 571.272.0928. The

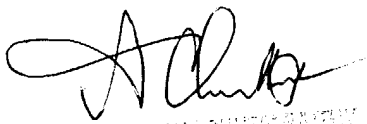
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fax phone numbers for all communications for the organization where this application or proceeding is assigned remains 703.872.9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is now 571.272.1600.

William W. Moore
May 21, 2004



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